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Japan Energy Newsletter

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Japan Electric Power Information Center, U.S.A.

1 Japan-U.S. Summit Meeting: Strengthening Collaboration through Promotion of Climate Change Commitments¹

On April 10, 2024, Prime Minister Kishida and President Biden held a summit meeting in Washington, DC, announcing the "Global Partners for the Future," a joint leaders' statement on the Japan-U.S. alliance. According to the statement, cooperation through the alliance has reached a new level over the past three years, and the two countries will expand their cooperative relationship in the following broad areas:

- 1) Strengthening defense and security cooperation
- 2) Exploring space frontiers
- 3) Promoting innovation
- 4) Strengthening economic security
- 5) Accelerating climate change commitments
- 6) Promoting collaboration in global diplomacy and development
- 7) Strengthening ties between the people in Japan and the United States

<Climate Change Commitments>

Among the seven areas listed above, in terms of climate change commitments, both Japan and the U.S. regard the climate crisis as a serious challenge, and have announced their policies to promote clean energy transition and strengthen energy security. The plan is to leverage Japan's Green Transformation (GX) strategy and the U.S. Inflation Reduction Act (IRA) in ways that maximize their synergistic benefits. This plan aims to promote complementary and innovative clean energy supply chains to improve industrial competitiveness and to accelerate the energy transition over the next decade.

Japan also announced that it will be the first international partner in the "Floating Offshore Wind Shot" initiative developed by the U.S. Department of Energy (DOE). The initiative will seek to achieve innovative breakthroughs that accelerate decarbonization and deliver benefits to coastal communities, aiming to reduce the cost of floating offshore wind by more than 70% to \$45 per megawatt hour by 2035.² In March 2024, Japan launched the Floating Offshore Wind Technology Research Association (FLOWRA), a new industrial platform that will work to reduce the costs involved in the mass production of floating offshore wind power generation.³

Meanwhile, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the DOE announced the launch of a new Japan-U.S. strategic partnership to demonstrate and commercialize fusion energy. The strategic partnership was launched on April 9, 2024.⁴ The two agencies have previously worked together on a range of projects in the field of nuclear fusion, including personnel exchange programs, joint research, and cooperative plans under the Coordinating Committee on Fusion Energy

¹ <u>https://www.mofa.go.jp/mofaj/files/100652109.pdf</u>

² <u>https://www.energy.gov/eere/wind/floating-offshore-wind-shot</u>

³ https://flowra.or.jp/files/libs/834/202403141219144167.pdf

⁴ <u>https://www.mext.go.jp/b_menu/activity/detail/2024/20240409_2.html</u>

(CCFE). The CCFE is based upon the agreement on research and development cooperation in the energy fields in 2013, under the Japan-U.S. Fusion Cooperation Agreement. The CCFE will continue to enhance the work of the strategic partnership and will hold additional meetings in the coming months.⁵

Furthermore, the U.S. will aim to support the energy security of its allies, including Japan, and to accelerate the global energy transition to zero emissions. The U.S. has also committed to maintaining a stable supply of liquefied natural gas (LNG) to minimize methane emissions throughout the fossil fuel value chain. Additionally, Japan and the U.S. have expressed their intent to intensify their joint efforts to disseminate innovative clean energy technologies and expand the supply of sustainable aviation fuel (SAF) and other renewable fuels, including those derived from ethanol.

⁵ <u>https://www.mext.go.jp/content/20240410-mext_kaisen-000035357_1.pdf</u>

2 Keidanren Proposes the Long-Term Strategic Policy for Industry and Energy⁶

On April 16, 2024, the Japan Business Federation (*Keidanren*) released "Toward Another Leap forward for Japanese Industry – calling for strengthening the industrial base based upon a long-term strategy," proposing the development of an integrated strategy to address Japan's fundamental industrial challenges, including labor shortages and energy crises.

<Background and Overview of the Proposal>

A medium- to long-term and overall optimization perspective is essential to cope with Japan's long-lasting economic stagnation over the past 30 years in Japan, especially since its fundamental challenges, such as labor shortages and energy issues, are becoming increasingly complicated. While multiple short- and medium-term strategies and plans have been formulated for each field in Japan, there is no long-term and integrated industrial strategy for the entire economy.

Consequently, this proposal calls for the nation to formulate an "Industrial Strategy 2040" targeting 2040 as a guideline for a new era of industrial collaboration. Rather than a traditional government-led industrial policy, the proposal calls for developing an industrial strategy that develops close cooperation between industry, academia, and government stakeholders, as well as establishing a business landscape that promotes further cooperation.

The proposal lists 10 major areas to be emphasized under the long-term strategy:

- 1) Domestic Investment Promotion/Legal System & Regulations
- 2) Digital
- 3) Energy
- 4) National Land/Region
- 5) Free and Open International Economic Rules
- 6) Startup Promotion/Industrial Transformation
- 7) Supply Chains
- 8) Intellectual Capital
- 9) Human Resources
- 10) Financial Capital

<Policy Recommendations regarding Energy>

In its section on energy, the proposal states that electric power is the most important resource for people's lives and industrial infrastructure, including developing and deploying cutting-edge technologies such as AI, robots, and semiconductors. As generative AI becomes more widespread, the power consumption from data centers is predicted to double by 2026. However, considering that Japan has unique geographic characteristics that make it difficult to procure electricity from other countries, the most

⁶ <u>https://www.keidanren.or.jp/policy/2024/031.html</u> <u>https://www.keidanren.or.jp/policy/2024/031_gaiyo.pdf</u>

significant issue in maintaining its international competitiveness is to secure a stable supply of affordable electricity.

To resolve these issues, the proposal makes the following recommendations, consisting of a) the development of long-term energy plans, b) promoting nuclear power, c) expanding the use of renewable energy, and d) reforming the energy system by strengthening the domestic manufacturing base, including hydrogen and storage batteries.

- a. Developing long-term energy plans
 - In order for companies to make effective investment decisions, the Japanese government needs to provide them with a long-term outlook on the electricity supply and demand through clear policies.
 - Considering that the government's "Basic Energy Plan" will be revised in Fiscal Year (FY) 2024, it is necessary to present a long-term outlook for the domestic energy demand, based on Japan's long-term industrial strategy over the years 2030, 2040, and 2050.
 - The government should clarify the path toward achieving its energy goals, including the supply base, energy mix, infrastructure development, and prices.
- b. <u>Promoting nuclear power</u>
 - It is essential to promote and actively make maximum use of nuclear power generation. Therefore, the government needs to take the lead in fostering an understanding of the use of nuclear power among citizens and local residents and promoting the early restart of idled nuclear power plants.
 - It is also important to fundamentally strengthen the support for developing and deploying next-generation innovative reactors, including fast reactors, high-temperature gas reactors, and nuclear fusion, by adding new reactors and replacing existing ones.
- c. Expanding the use of renewable energy
 - Expanding the use of renewable energy is one of the nation's highest priorities. In order to make renewable energy a primary power source, the business environment should be improved by supporting domestic parts manufacturers and strengthening the supply chain.
 - From the economic security perspective, it is important to promote the development of energy infrastructure that will improve cost efficiency through the maximum use of domestic resources, such as biomass, and prioritizing local production for local consumption.
- d. <u>Reforming the energy system and strengthening the domestic manufacturing</u> <u>base, including hydrogen and storage batteries</u>
 - Strengthening Japan's domestic power grid and developing regional interconnection transmission lines across the nation is essential for efficient energy distribution and a stable power supply.

- From the perspective of international competition, it is also important to develop and deploy storage batteries and strengthen the domestic manufacturing base.
- As a result, the long-term strategy should emphasize promoting power generation using hydrogen and ammonia as fuel, and achieving carbon neutrality in fossil-fuel power generation through the development of CCS/CCUS technology.

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